

# Internet Service Features and Satisfaction among Internet Banking Users

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## **Abstract**

Internet banking gives customers the option to perform banking transactions and other related

activities on the go or from home, twenty-four hours a day, 365 days a year. With improved efficiency and effectiveness more transactions can be processed faster and conveniently, which impact the overall bank's performance. Banks want their customers to migrate from conventional banking to internet banking a means to ease their transaction processes. However, it is rather difficult to get a buy-in among customers as many are worried about the application limitations, security issues and inadequacies of internet connection quality. Though the numbers of internet banking users have increased annually, the numbers of active users are still unimpressive. A sizeable percentage of bank customers are either not ready or unwilling to use internet banking. Hence, to strategize and convince customers to use internet banking, mandates the need to understand their satisfaction on key service features offered through internet banking to them. A conceptual model with nine factors namely, ease of use, accessibility, feature availability, customer support, security, privacy, content, fees and charges, and also transaction and payment was developed and empirically tested using self-report survey data from 120 internet banking users from 3 branches in Shah Alam, Selangor. Simple random sampling was used to select respondents and data analyzed through SPSS. Four factors that is, ease of use, customer support, privacy, and transaction and payment were found to have significantly influenced customer satisfaction toward internet banking transaction. This calls for continuous innovation among banking institutions to enhance these service features to sustain the interest and satisfaction of their internet banking users.

**Keywords:** Internet Service Features, Customer Satisfaction, Internet Banking

## **1. Introduction**

Nupur, (2010), Arunachalam and Sivasubramanian (2007) and Ongkasuwan and Tantichattanon (2002), defined internet banking as the ability of users to access their bank account via the internet by using the electronic device such as personal computer (PC) or mobile phone and web-browser at any time or place. The presence of numerous service feature internet banking enables bank customers to transfer and make payments, access latest balance, statement viewing, account detail viewing, customization, printing, downloading statements and history of all statement and accounts linked to the bank's Automated Teller Machine (ATMs) including bill payment, fund transfer, ATM service, credit card, investment service, insurance, loan application and loan approval.

## **2. Research Problem**

In this new global economy era banking institutions need to remain competitive by offering superior services to ensure customer satisfaction. A hallmark of internet banking is improved efficiency and effectiveness of banking operations. More transactions can be processed faster and conveniently, which undoubtedly impact the overall performance of banks. Customers on the other hand, enjoy the benefits of quick service delivery, less frequency of going to banks physically and less cash handling, which results in higher volume of turnover. As such there is a need to ascertain if customers are satisfied with the operational aspect of internet banking as some may be skeptical with the security aspect of this service particularly when dealing with money. This would enable banking institutions to continuously convert and increase the number of inactive users to active internet banking users in future.

## **3. Literature Review**

Customer satisfaction is an indefinite and uncertain concept as it differs from person to person or by types of products or service (Kumbhar, 2011). McIlroy and Barnett (2000) postulated that satisfaction is a measure of how well customer's expectations were met and would eventually translate into repeat purchase, loyalty and retention (Ankit, 2011, Zairi, 2000). Jamal & Naser, (2002) opines that measuring customer satisfaction was the key influence in the formation of customers' future intentions. Hearing their customers' voice would safeguard the bank's customer base and preserve their future sustainability and profitability.

This research was based on the Expectancy Disconfirmation Theory (EDT). EDT is defined as a total evaluation of customer satisfaction in the context of perceived quality for services and products. The processes consist of "before and after experiencing", meaning customers can only evaluate the service received when they have their own expectations that can be compared to the real results or outcomes (Mattila and O'Neill, (2003), Franklin and Shemwell, (1995). According to Ekinici and Sirakaya (2004) and Bhattacharjee (2001), disconfirmation theory was repeatedly applied to predict users' satisfaction with a technology. It ascertains the disconfirmation experience based on the impact of actual performance against expectation. If the performance received was higher than expectations, positive disconfirmation will translate into satisfaction and vice versa. However, if the outcomes equal the expectations, it

results in zero disconfirmation. In this study internet banking customers compared their expectations with the real experience of using the internet banking service provided. Hence, satisfaction level was ascertained by asking their opinion after they used the services.

Sadeghi and Hanzae (2010) have highlighted convenience, accessibility, accuracy, security, usefulness, bank image, and website design as factors that have contributed towards customer satisfaction of internet banking services. On a similar note, Ahmad and Al-Zu'bi (2011) established a positive relationship between convenience, accessibility, security, website design (adoption) and customer satisfaction. Consequently, Wang, Tang and Tang (2001), added customer support, ease of use, digital products or services, transaction and payment, information content, and innovation as satisfaction contributors to internet banking users.

The internet banking service features incorporated in this study ease of use, accessibility, feature availability, customer support, security, privacy, transaction and payment, content, and fees and charges.

**Ease of use:** Joseph, McClure and Joseph (1999) postulated that internet banking service is technology based and comprises of six dimensions namely convenience/accuracy, efficiency, customization, accessibility, feedback/complaint, and queue management that can have positive effects on customer satisfaction. A study by Poon (2007), showed that convenience, specifically easy login, easy to use and user friendly were factors' that significantly affects customer satisfaction of internet banking. Ahmad and Al Zu'Bi (2011), Mobarek (2007) and Venkatesh and Davis, (1996) concurred with these findings.

**Accessibility:** Hackett and Parmanto (2009) defined accessibility as the ability of user to access information and services from the web. Poon (2007), discovered that internet banking users place high importance on the availability of internet connection to facilitate their usage of internet banking facility. Equally important was their ability to access details pertaining bank charges, fund transfer between accounts, information on competitors' interest rates, foreign exchange rate commission charged for foreign exchange, information on security arrangement and the availability of search engine.

**Feature Availability:** Gerrard and Cunningham (2003) identified innovative features on the website such as interactive loan calculators, exchange rate converters, and mortgage calculators as those that would pull the attention of both users and non-users to the bank's website hence promoting the success of internet banking. According to Poon (2007), features offered via internet banking such as availability of appropriate technology and technical support, proper introduction and development of electronic services may influence web users' satisfaction.

**Customer Support:** It is equally important that internet banking website offer easy access to the frequently asked questions page (Ahmad and Al-Zu'bi, 2011). Raman, Stephenaus, Alam and Kuppusamy (2008) concurred that effective internet banking service should provide good communication between the website's user and service provider to facilitate channeling of feedback on the services and complaints. On the same note, Nochai and Nochai (2013) advocated that customer support is important as users may need guidance on how to use the

service. Users too may have questions they would like to ask and expect website providers to respond promptly. Immediate bank's response to customers' requests is important to ensure that their transactions are not affected Poon (2007).

**Security:** With the introduction of internet banking customers still frequent banks and deal in person because they feel comfortable. Security of the internet banking system has been a longstanding concern. Users are afraid of illegal access to their confidential financial details through the bank's system (Poon, 2007). Despite being empowered to use their own username and password majority of internet banking users do not save their username and password in the computer, as a precautionary measure to safeguard their account. Users are also worried over hackers accessing their account. In short many are still doubtful over bank's ability to protect them as internet banking users and are still displeased with how banks manage this security issue. Hence mitigating this security issue will increase user's trust in the security of internet banking which may in turn convert potential users into actual users (Lallmahamood, 2007).

**Privacy:** Privacy is a salient feature among users of internet banking (Ahmad and Al Zu'Bi, 2011). The incorporation of technology such as encryption system is important to safeguard all private and confidential information. This system would be integrated with a combination of different identifiers such as password, memorable date or numbers, or the system will be automatically logged out after a few minutes of idle time. This privacy factor was reiterated by Poon (2007), who uncovered cases of private information not delivered safely from banks to customer's and web owned by banking institution divulging customers' financial data within the banking group. These incidences have made customers feel that there was no privacy to use internet banking.

**Transaction and Payment:** Kuisma, Laukkanen, and Hiltunen (2007) and Wang et al. (2001), postulated one main service feature sought by internet banking users is easy payment system and transaction procedure. More important the transaction and payment matters need to be clear and precise particularly the pricing information for the service offered.

**Content:** Usage of internet banking is largely propelled by the content posted on the bank's website (Ahmad and Al-Zu'bi, 2011). Reason being, understandable and clear instructions would facilitate customers' to operate internet banking services easily which may influence their decision to use this service more. Jayawardhena and Foley (2000), uncovered that in situations where the website content was easy and interesting to use, buyers were more receptive in using them. Consequently, Poon (2007) concurred that the presence of instructions that were easy to follow and clearly understandable would make internet banking transactions easier. In addition, availability of credible information and ability to seek help when problems arise may also influence users to navigate the website frequently.

**Fees and Charges:** Internet banking has been proven to lower the operating and administrative expenses of banking institutions (Devlin, 1995). Therefore banking institutions strive to provide high quality service at a lower cost to fulfill customers' needs. Internet banking customers' expects to be charged a nominal rate or no charges at all, in pursuing their banking transaction online.

As the array of service features are many and in recognition that customers banking needs are dynamic this study is set to ascertain the salient service features attributing to satisfaction among internet banking users and to propose strategies to increase usage rate for a leading local bank.

#### **4. Research Methodology**

In this research, primary data were gathered via the use of structured and self-administered questionnaire. Secondary data were sources from Annual Reports, books, articles, journals from Emerald and Science Direct.

The target population of this research was internet banking users from one leading bank in Shah Alam. A two tier sampling approach was applied. From a total of 6 branches in Shah Alam (Section 7, 14, 18, 19, 20 and Setia Alam, 3 branches were selected using the simple random sampling method. A total of 120 questionnaires were distributed to the three banks (40 questionnaires @ branch). According to Roscoe (1975), as a rule of thumb, sample size that is larger than 30 and less than 500 were appropriate for most research. With the assistance of each bank current internet banking users were reached to get their participation via simple random sampling.

A structured questionnaire was used for data collection. Sections in the questionnaire included: Section A - demographics, Section B, satisfaction of service features (ease of use, accessibility, feature availability, customer support, security, privacy, content, fees and charges, and transaction and payment) measured on a 5-point Likert scale from "1" (strongly disagree) to "5" (strongly agree) and Section C, overall level of satisfaction of respondents.

Data was analyzed using Statistical Package for Social Science (SPSS). The Cronbach Alpha was obtained to ascertain the internal consistency of instrument used. Both the descriptive and inferential statistics were analyzed.

#### **5. Findings and Discussion**

From the distributed questionnaires 101 usable questionnaires were obtained. Respondent's comprised of 51% male and 49% female. Majority were below than 25 years old (50.5%), followed by 43% between the ages of 26 to 45 years. Malays constituted 67% followed by Chinese 17% and Indians 16%. An overwhelming 62% are single and 37% married. Majority (67%) are degree holders, earning between RM3000 to RM4600 (36%) and 100% are computer literate with 92% having internet access at home.

The Cronbach Alpha value obtained ranged between 0.8 to 0.9 for all the internet service features and satisfaction measurement. According to Sekaran and Bougie (2010), Cronbach's Alpha values exceeding 0.80 is good.

A moderate to strong positive association was found between all the service features of internet banking and customer satisfaction at 0.001 level of significance.

A significant relationship at 0.000 was also established between service features of internet

banking and customer satisfaction (Table 1). The adjusted R-square of 0.754 shows that approximately 75% of the variance in customer satisfaction towards the internet banking services offered by this leading local bank explained by Ease of Use, Accessibility, Customer Support, Security, Privacy, Content, Fees and Charges, and Transaction and Payment. Among the nine (9) service features offered by this bank, 4 service features namely Ease of Use, Customer Support, Privacy, and Transaction and Payment were found to be significant at 0.05 level of significance. In their decreasing order of importance, the standard coefficient beta for Transaction & Payment was 0.302, Privacy was 0.225, Ease of Use was 0.224 and Customer Support was 0.151.

Transaction and Payment played an important role in delivering customers satisfaction among users of internet banking service of bank. Kuisma, Laukkanen, and Hiltunen (2007) and Wang et al. (2001), postulated easy payment system and transaction procedure is a must by internet banking provider. More important the transaction and payment matters need to be clear and precise particularly the pricing information for the service offered. Customers expect reasonable payment quantum for service rendered by this bank and such payment must be easily remitted to the bank. The Privacy feature parallels with literature from Ahmad and Al Zu'Bi (2011) where internet banking users expect bank to safeguard all private and confidential information pertaining to their financial transaction. As such this bank must continuously engage in research and development to upgrade their security system, for internet banking service to garner continuous confidence among their users. Ease of Use was supported by Ahmad and Al Zu'Bi (2011), Mobarek (2007) and Venkatesh and Davis (1996), particularly easy login, easy to use and user friendly traits of the system. Users expect convenience delivered through these features when they are using the internet banking services Poon (2007). Convenience may be a unique selling proposition this bank can use in getting their customers to switch from conventional to internet banking. Consequently, Nochai and Nochai (2013) emphasized the importance of Customer Support given to internet banking users. This is well founded in this study. Customers expect good communication between the website's user and service provider and their queries/requests to be attended to immediately Raman, Stephenaus, Alam and Kuppusamy (2008). Time is the essence and prompt service is a must for all internet banking providers.

Table 1. Regression between Service Features and Satisfaction of Internet Banking

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881 <sup>a</sup>	.777	.754	2.938

a. Predictors: (Constant), Trans. & Payment, Sum Ease Of Use, Customer Support, Security, Fees & Charges, Accessibility, Content, Privacy, Feature Availability



**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2729.768	9	303.308	35.144	.000 <sup>b</sup>
Residual	785.361	91	8.630		
Total	3515.129	100			

a. Dependent Variable: OVERALL SATISFACTION

b. Predictors: (Constant), Trans. & Payment, Sum Ease Of Use, Customer Support, Security, Fees & Chrges, Accessibility, Content, Privacy, Feature Availability

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.474	2.520		.585	.560
Ease of use	.608	.179	.224	3.394	.001
Accessibility	.068	.131	.048	.522	.603
Feature availability	-.120	.180	-.064	-.667	.506
Customer support	.143	.069	.151	2.082	.040
Security	.223	.121	.153	1.846	.068
Privacy	.444	.176	.225	2.523	.013
Content	.047	.191	.021	.245	.807
Fees & chrges	.127	.132	.067	.962	.339
Trans. & payment	.612	.180	.302	3.396	.001

a. Dependent Variable: Overall Satisfaction

**6. Conclusion**

Internet banking users have precise expectations of service features that are important to them and would influence their continuous usage at this bank. All of this service features are well aligned with literature from previous studies. As much as banks venture into internet banking to save cost and improve productivity as well as profitability. Customers would reciprocate and switch from traditional banking, provided that it is easy for them to use this new system, the privacy of their financial transaction is well guarded, transaction charges are reasonable and any problems that arises can be dealt with by the bank promptly. Hence, it is essential for this bank to continuously improve on these features to gain the confidence and loyalty of their users to this



service. These satisfied users tend to be loyal and will engage in positive word-of-mouth, which in turn will benefit this bank.

## References

- Ankit, S. (2011). Factors Influencing Online Banking Customer Satisfaction and Their Importance in Improving Overall Retention Levels: An Indian Banking Perspective. *Information and Knowledge Management*, 1(1), 45-54.
- Arunachalam, L., & Sivasubramanian, M. (2007). Theoretical Framework to Measure the User Satisfaction in Internet Banking. *Academic Open Internet Journal*, 20.
- Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quart.*, 25(3), 351-370. <http://dx.doi.org/10.2307/3250921>
- Devlin, J.F. (1995). Technology and Innovation in Retail Banking Distribution. *International Journal of Bank Marketing*, 13(4), 19-25. <http://dx.doi.org/10.1108/02652329510082915>
- Franklin, K. K., & Shemwell, D. W. (1995). *Disconfirmation Theory: An Approach to Student Satisfaction Assessment in Higher Education*.
- Gerrard, P., & Cunningham, J. B. (2003). The Diffusion of Internet Banking among Singapore Consumers. *International Journal of Bank Marketing*, 21(1), 16-28. <http://dx.doi.org/10.1108/02652320310457776>
- Hackett, S., & Parmanto, B. (2009). Homepage Not Enough When Evaluating Web Site Accessibility. *Internet Research*, 19(1), 78-87. <http://dx.doi.org/10.1108/10662240910927830>
- Jamal, A., & Naser, K. (2002). Customer Satisfaction and Retail Banking: An Assessment of Some of the Key Antecedents of Customer Satisfaction in Retail Banking. *International Journal of Bank Marketing*, 20(4), 146-160. <http://dx.doi.org/10.1108/02652320210432936>
- Jayawardhena, C., & Foley, P. (2000). Change in Banking Sector – The Case of Internet Banking in the UK. *Internet Research Electronic Networking Application and Policy*, 10(1), 19-30. <http://dx.doi.org/10.1108/10662240010312048>
- Joseph, M., McClure, C., & Joseph, B. (1999). Service Quality in the Banking Sector: The Impact of Technology on Service Delivery. *International Journal of Bank Marketing*, 17(4), 182-191. <http://dx.doi.org/10.1108/02652329910278879>
- Kumbhar, V. M. (2011). Factors Affecting on Customers ‘Satisfaction in E-Banking: Some Evidences Form Indian Banks. *Management Research and Practice*, 3(4), 1-14.
- Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the Reasons for Resistance to Internet Banking: A Means-end Approach. *International Journal of Information Management*, 27(2), 75-85. <http://dx.doi.org/10.1016/j.ijinfomgt.2006.08.006>
- Lallmahamood, M. (2007). An Examination of Individual’s Perceived Security and Privacy of

the Internet in Malaysia and the Influence of This on Their Intention to Use E-Commerce: Using an Extension of The Technology Acceptance Model. *Journal of Internet Banking and Commerce*, 12(3), 1-26.

Mattila, A., & O'Neill, J. W. (2003). Relationships between Hotel Room Pricing, Occupancy, and Guest Satisfaction: A Longitudinal Case of a Midscale Hotel in the United States, *Journal of Hospitality & Tourism Research*, 27(3), 328-341. <http://dx.doi.org/10.1177/1096348003252361>

Maybank Annual Report 2009, 2010, 2011, 2012. Retrieved from <https://www.maybank.com>

McIlroy, A., & Barnett, S. (2000). Building Customer Relationships: Do discount cards work?. *Managing Service Quality*, 10(6), 347-355. <http://dx.doi.org/10.1108/09604520010351491>

Mobarek, A. (2007). E-Banking Practices and Customer Satisfaction-A Case Study in Botswana. In *20th Australasian Finance & Banking Conference*.

Nochai, R., & Nochai, T. (2013). *The Impact of Internet Banking Service on Customer Satisfaction in Thailand: A Case Study in Bangkok*.

Nupur, J.M. (2010). E-Banking and Customers' Satisfaction in Bangladesh: An Analysis. *International Review of Business Research Papers*, 6(4), 145-156

Ongkasuwan, M., & Tantichattanon, W. (2002). A Comparative Study of Internet Banking in Thailand. In *The First National Conference on Electronic Business, Bangkok*, 24-25.

Poon, W. C. (2007). Users' Adoption of e-Banking Services: The Malaysian Perspective. *Journal of Business & Industrial Marketing*, 23(1), 59-69. <http://dx.doi.org/10.1108/08858620810841498>

Raman, M., Stephenaus, R., Alam, N., & Kuppusamy, M. (2008). Information Technology in Malaysia: E-service Quality and Uptake of Internet Banking. *Journal of Internet Banking and Commerce*, 13(2), 1-18.

Roscoe, J. T. (1975). *Fundamental Research Statistics for the Behavioral Sciences*. 2<sup>nd</sup> Edition. New York: Holt, Rinehart and Winston.

Sadeghi, T., & Hanzae, K. H. (2010). Customer Satisfaction Factors (CSFs) with Online Banking Services in an Islamic Country: IR Iran. *Journal of Islamic Marketing*, 1(3), 249-267. <http://dx.doi.org/10.1108/17590831011082428>

Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*. Wiley.

Venkatesh, V., & Davis, F. D. (1996). A Model of the Antecedents of Perceived Ease of Use: Development and Test. *Decision Sciences*, 27(3), 451-481. <http://dx.doi.org/10.1111/j.1540-5915.1996.tb01822.x>

Wang, Y. S., Tang, T. I., & Tang, J. T. E. (2001). An Instrument for Measuring Customer

Satisfaction toward Web Sites that Market Digital Products and Services. *Journal of Electronic Commerce Research*, 2(3), 89-102.

Zairi, M. (2000). Managing Customer Dissatisfaction Through Effective Complaints Management Systems. *The TQM Magazine*, 12(5), 331-337.  
<http://dx.doi.org/10.1108/09544780010341932>

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